

## ABSTRACT OF THE DISCLOSURE

### AN ACCURATE POSITIONER SUITABLE FOR SEQUENTIAL AGILE TUNING OF PULSE BURST AND CW LASERS

A positioning system including a sensor, a drive sequencer and an actuator. The sensor senses the actuator position and provides position signals to drive the sequencer which responsively computes and drives the actuator in open loop moves containing dwell intervals of position. The actuator positions a mirror or other load means to reflect an optical beam as desired. Either preprogrammed or non-repeating sequences of actuator stopping positions can be synchronized with a laser. During dwell times, mirror position accuracy better than 10 microradians is suitable for tuning CO<sub>2</sub> pulse burst or CW lasers.